

## **INITIAL STATEMENT OF REASONS**

### **Transition Silviculture Method 2004**

[April 9, 2004]

#### **Title 14 of the California Code of Regulations (14 CCR):**

Amend:

§ 913.2(b) [933.2(b), 953.2(b)]      **Regeneration Methods Used in Unevenaged  
Management; Transition**

§ 913.11(c)(1)&(2) [933.11(c)(1)&(2), 953.11(c)(1)&(2)]  
**Maximum Sustained Production of High Quality  
Timber Products**

The proposed changes to the Forest Practice Rules are related to amending the “Transition Method”, a silvicultural method which permits tree harvesting to develop an unevenaged forest stand. The amendments are generally considered “regulatory relief” to the existing rules in they permit a wider variety of trees to meet the post harvest stocking size requirements, compared to the existing rule. By expanding the post harvest stocking tree characteristics, greater flexibility is provided to small landowners allowing them to more quickly transition evenaged or irregular stands to unevenaged stands.

The Maximum Sustained Production of High Quality Timber Products (MSP) amendment provides consistency to stocking standards permitted under the revised Transition Method rule.

#### **PUBLIC PROBLEM, ADMINISTRATIVE REQUIREMENT, OR OTHER CONDITION OR CIRCUMSTANCE THE REGULATION IS INTENDED TO ADDRESS**

One of the most attractive goals to nonindustrial timber landowners, and a requirement of nonindustrial timber landowners harvesting under Article 7.5. Nonindustrial Timber Management Plan (NTMP) is to create an all-aged stand that continually yields benefits and regenerates itself. The outcomes can theoretically provide a continuous flow of income, minimize regeneration expenditures and approximate some ecological equilibrium that provides multiple biological and social benefits. However, nonindustrial landowners may have stands with relatively low stocking levels, irregular stand diameter and tree number distributions, and expensive reinvestment options to rehabilitate stands to balance age/size structures.

The Silviculture Methods Articles of the Forest Practice Rules are devised to recognize

the needs of nonindustrial timber landowners (and others) with understocked , evenaged, or irregular stands that they wish to manage under a unevenaged silviculture system through use of the transition method. However, the existing Transition rule (§ 913.2(b) [933.2(b), 953.2(b)] has some limitations to those wanting to create more balanced, unevenaged stands. Several problems with the existing rule are found:

- **Restrictive preharvest stocking requirements preclude appropriate use of the transition method** - The existing rule identifies specific stand characteristics where the transition method can be applied. However, some forest stands suitable for the transition method are precluded from using the method because of the existing rule limitations. Preclusion of suitable stands are due to the presence of higher preharvest basal areas than permitted by the existing rule. While these stands have higher basal areas than permitted by existing rules, they do not contain the suitable basal area of seed trees of the required dbh that will meet post harvest stocking requirements (e.g., true fir or lodgepole stands). This results in these stands not being permitted to use the transition method, even though they contain adequate seed producing trees.
- **Restrictive post harvest stocking standards do not take into account preharvest conditions** – Some stands applicable for the transition method do not have preharvest conditions (in terms of minimum number of seed producing trees 18 inch and greater dbh trees) that allow meeting the existing post harvest stocking requirements. Many stands with small diameter evenaged conditions or severely understocked stands with small trees are applicable for the transition method, but cannot be used with transition methods because of the post harvest retention tree size requirement. An adjustment is needed to post harvest stocking requirements to provide better matching and consistency of preharvest conditions. By reducing post harvest seed tree size requirements (seed tree dbh standard from 18 inches to 12 inches) for the period the stand is accumulating trees to meet the selection basal area standards, the RPF has an expanded tree population to select the best phenotypes and species diversity.
- **Restrictive post harvest stocking sample requirements-** The existing rule specifies that post harvest stocking shall be determined using minimum basal areas per acre as outlined in 14 CCR 912.7(b)(2)[932.7(b)(2), 953.7(b)(2)]. This can be interpreted as meaning each acre will have the requirement. To help clarify sampling procedures to be more congruent with irregular stands, the rule amendment addresses post harvest basal area stocking per acre to be determined by averaging the sample data across the entire sample area and not on an individual acre basis.
- **Ensure requirements for retaining larger sized tree in post harvest stands are maintained-** By allowing the post harvest seed tree stocking to be

comprised of trees as small as 12 inches dbh, recognition is given to the value of retaining the larger, more seed producing trees when available. This is accomplished by requiring retention of suitable 18 inch dbh or larger trees as the priority seed trees to meet post harvest stocking standards, when they are present in the preharvest stand.

- **Restrictive re-entry limitations.** - The existing rule excludes subsequent transition method harvesting for 10 years following the first harvest. Many unforeseen natural or economic events can happen in a ten year period. Re-entry into the stand without filing a major Timber Harvest Plan Amendment (THP) should be provided. Anecdotal information suggests this restriction is the primary reason for RPFs rejecting this silvicultural method.

### **§ 913.2(b) [933.2(b) , 953.2(b)] Regeneration Methods Used in Unevenaged Management; Transition**

#### **SPECIFIC PURPOSE OF THE REGULATION**

The proposed changes to the Forest Practice Rules make the “transition method” a more useful method to small landowners, particularly to those with a NTMP which requires the use of unevenaged silvicultural methods. The transition method is the removal of trees individually or in small groups from irregular or evenaged stands to create a balanced unevenaged stand structure and to obtain natural reproduction.

The general purpose with the existing transition method regulation is to create a balanced, unevenaged forest. This means a forest with a multi-aged tree distribution with a balanced structure where tree numbers or basal areas are evenly distributed among the age classes. This forest structure promotes growth on trees throughout a broad range of diameter classes, encourages natural reproduction and achieves previously mentioned economic and social goals.

The changes proposed provide small forest landowners who actively manage their forests regulatory relief by permitting a wider range of conditions under which the transition method can be used. The expanded range of conditions primarily relates to development of an unevenaged stand from a stand that currently does not contain sufficient trees to meet the minimum basal area, size and phenotypic quality requirements specified by the current transition stocking requirements (seed tree method standards as described in § 913.1(c)(1)(A)[933.1(c)(1)(A), 953.1(c)(1)(A)]. Subsection § 913.2 [933.2, 953.2](b) is modified to articulate this intent.

Subsection § 913.2(b)(1)[933.2(b)(1), 953.2(b)(1)] modifies the existing rule language to clarify the area for determination of preharvest stocking levels shall be no greater than 20 acres in size. This is different from the existing rule where area determination of preharvest stocking levels can be greater than 20 acres.

Subsection § 913.2(b)(2) [933.2(b)(2), 953.2(b)(2)] clarifies existing grammar and

consistency relative the types of silvicultural method intended to be used following the use of the transition method.

Subsection § 913.2 (b)(3) [933.2(b)(3), 953.2(b)(3)] deletes the overly restrictive requirements for stand suitability for use of the transition method. It is replaced with a broader definition of suitable stands, focusing on permitting the transition method for stands having trees adequate for natural regeneration.

Subsection § 913.2(b)(4),(5) and (7)[933.2(b)(4),(5) and (7), 953.2(b)(4),(5) and (7)] clarifies grammar.

Subsection § 913.2(b)(6) [933.2(b)(6), 953.2(b)(6)] modifies the post harvest stocking standards. Existing rules require post harvest stocking standards to meet seed tree requirements (§ 913.1(c)(1)(A)[933.1(c)(1)(A), 953.1(c)(1)(A)] This rule amendment broadens the stocking requirements to permit trees less than 18 inch dbh but greater than 12 inches dbh to be sufficient residual stand seed trees.

Subsection § 913.2(b)(8)[933.2(b)(8), 953.2(b)(8)] replaces existing rule subsection § 913.2 (b)(7)[933.2(b)(7), 953.2(b)(7)] It specifies that the plan submitter shall demonstrate that the standards of the selection regeneration method will be met for the third entry of Plan areas harvested by the transition method.

## **NECESSITY**

The amendments to the existing rules are needed to address issues stated in the section on PUBLIC PROBLEM, ADMINISTRATIVE REQUIREMENT, OR OTHER CONDITION OR CIRCUMSTANCE THE REGULATION IS INTENDED TO ADDRESS.

### **§ 913.11(c)(1)&(2)[933.11(c)(1)&(2), 953.11(c)(1)&(2)] Maximum Sustained Production of High Quality Timber Products**

## **SPECIFIC PURPOSE OF THE REGULATION**

Subsection § 913.11(c)(1)[933.11(c)(1), 953.11(c)(1)] is modified to correct a defect in citing only the Coast District's stocking requirements.

Subsection § 913.11(c)(2)[933.11(c)(2), 953.11(c)(2)] is modified to incorporate the post harvest stocking standards proposed under the transition method amendment of subsection § 913.2(b)(6)[933.2(b)(6), 953.2(b)(6)], Regeneration Methods Used in Unevenaged Management, into the post harvest MSP stocking requirements. It is also modified to correct a defect in citing only the Coast District's stocking requirements.

## **NECESSITY**

This amendment is needed to provide consistency of stocking standards required to meet MSP and those permitted under the proposed amendment of the transition method rule. Existing rule subsection § 913.11(c) (2) [933.11(c) (2), 953.11(c) (2)] describes stocking standards that meet the requirements of MSP. It currently does not permit the stocking standards proposed under the amended subsection § 913.2(b)(6)[933.2(b)(6), 953.2(b)(6)] Regeneration Methods Used in Unevenaged Management.

## **ALTERNATIVES TO THE REGULATION CONSIDERED BY THE BOARD AND THE BOARD'S REASONS FOR REJECTING THOSE ALTERNATIVES**

The Board has considered alternatives to the regulation proposed. All alternatives provide equal or better environmental protection than existing regulation. Thus no significant environmental effects will result as a selection of any alternative. Alternatives included consideration of using Alternative Prescription as permitted under 14 CCR 913.6 [933.6, 953.6]. This alternative was not selected as the proposed rule provides equal environmental protection, and reduces the economic impact of those using the transition method to create unevenaged forest stands from stands not meeting a seed tree stocking requirements.

## **POSSIBLE SIGNIFICANT ADVERSE ENVIRONMENTAL EFFECTS AND MITIGATIONS**

The Board has not identified any adverse environmental effects as a result of the proposed rules. These rules are expressly developed to improve protection of resources during timber harvesting and maintain minimum resource conservation standards.

The most substantial potential environmental change due to this rule is permitting the post harvest seed tree stocking standard (as required in proposed amendment of Transition rule subsection § 913.2(b)(6)[933.2(b)(6), 953.2(b)(6)] to be met with 12 inch or greater dbh trees instead of 18 inch or greater dbh trees, when the 18 inch trees are not present in the preharvest stand. However, the amendment requires retaining 18 inch and greater dbh tree for seed tree stocking requirements if they are present in the preharvest stand. As such, there is no change in the environmental protection provided by the existing rule.

Any project proposing to utilize the methods allowed under this rulemaking action would be required to adhere to all other existing FPRs and the Forest Practice Act. The provisions of the rules must be followed by Registered Professional Foresters (RPFs) in preparing THPs, and by the Director in reviewing such Plans to achieve the policies described in Sections 4512, 4513, of the Act, 21000, 21001, and 21002 of the Public Resources Code (PRC), and Sections 51101, 51102 and 51115.1 of the Government Code. Pursuant to 14 CCR sec. 896, no THP shall be approved which fails to adopt

feasible mitigation measures or alternatives from the range of measures set out or provided for in the rules which would substantially lessen or avoid significant adverse impacts which the activity may have on the environment. The THP process substitutes for the EIR process under California Environmental Quality Act (CEQA) because the timber harvesting regulatory program has been certified pursuant to PRC Section 21080.5 and therefore receives a multidisciplinary review to ensure protection of resources and conformance with all applicable laws and regulations.

### **EVIDENCE SUPPORTING FINDING OF NO SIGNIFICANT ADVERSE ECONOMIC IMPACT ON ANY BUSINESS**

The Board staff estimated that this regulation should not have any adverse economic impact on any business. The amendment generally provides a wider range of conditions for which the transition method can be used, thus providing greater opportunities for use and reduction of identified barriers to use.

### **ALTERNATIVES TO THE PROPOSED REGULATORY ACTION THAT WOULD LESSEN ANY ADVERSE IMPACT ON SMALL BUSINESS**

The Board has not identified any alternatives that would lessen any adverse impact on small businesses.

### **TECHNICAL, THEORETICAL, AND/OR EMPIRICAL STUDY, REPORTS, OR DOCUMENTS**

The Board relied on the following technical, theoretical, or empirical studies, reports or documents in proposing the adoption of this regulation as referenced in this *Statement of Reasons*:

1. Smith, David. 1982. The Practice of Silviculture. John Wiley and Sons. Eighth edition.
2. Waddell, K.L. and P.M. Bassett. 1996. Timber resource statistics for the north coast resource area of California. Resource Bulletin PNW-RB-214. Portland, OR: U.S. Forest Service, Pacific Northwest Research Station.
3. Waddell, K.L. and P.M. Bassett. 1997a. Timber resource statistics for the central coast resource area of California. Resource Bulletin PNW-RB-221. Portland, OR: U.S. Forest Service, Pacific Northwest Research Station.
4. Waddell, K.L. and P.M. Bassett. 1997b. Timber resource statistics for the north interior resource area of California. Resource Bulletin PNW-RB-222. Portland, OR: U.S. Forest Service, Pacific Northwest Research Station.
5. Waddell, K.L. and P.M. Bassett. 1997c. Timber resource statistics for the Sacramento resource area of California. Resource Bulletin PNW-RB-220. Portland, OR: U.S. Forest Service, Pacific Northwest Research Station.
6. Waddell, K.L. and P.M. Bassett. 1997d. Timber resource statistics for the San Joaquin

and southern resource area of California. Resource Bulletin PNW-RB-224. Portland, OR: U.S. Forest Service, Pacific Northwest Research Station.

7. Smith, W.B., J.S. Vissage, R. Sheffield, and D.R. Darr. 2001. Forest resources of the United States, 1997. General Technical Report NC-219. St. Paul, MN: U.S. Forest Service, North Central Research Station.
8. Fire and Resource Assessment Program (FRAP). 2003. Timberland inventory Characteristics. Sacramento, CA.  
[http://www.frap.cdf.ca.gov/assessment2003/Chapter2\\_Area/timberland.pdf](http://www.frap.cdf.ca.gov/assessment2003/Chapter2_Area/timberland.pdf)
9. Richards, R. November, 15, 2003. memo to the Board of Forestry
10. Sudworth, G. B. 1908. Forest Trees of the Pacific Slope. Forest Service of the U.S. Department of Agriculture. Copyright 1967 by Dover Publications, Inc.
11. USDA Forest Service. Agricultural Handbook 654.
12. Forest Service Web Page: [http://www.fs.fed.us/database/feis/plants/tree/\[type in scientific name\]](http://www.fs.fed.us/database/feis/plants/tree/[type%20in%20scientific%20name])

**Pursuant to Government Code § 11346.2(b)(6)**: In order to avoid unnecessary duplication or conflicts with federal regulations contained in the Code of Federal Regulations addressing the same issues as those addressed under the proposed regulation revisions listed in this *Statement of Reasons*; the Board has directed the staff to review the Code of Federal Regulations. The Board staff determined that no unnecessary duplication or conflict exists.

## **PROPOSED TEXT**

The proposed revisions or additions to the existing rule language is represented in the following manner:

UNDERLINE indicates an addition to the California Code of Regulations, and

~~STRIKETHROUGH~~ indicates a deletion from the California Code of Regulations.

All other text is existing rule language.

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